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Claims:-

## 1. Use of a compound of formula I

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its salts, and pharmaceutically acceptable derivatives thereof, in the treatment of infections involving viruses of the *Pneumovirinae* sub-family, wherein

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A together with the atoms to which it is attached, forms an optionally substituted aromatic ring;

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linker B-C together with the atoms to which they are attached, forms an optionally substituted heterocyclic ring having from 5 to 8 ring atoms;

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 $R_1$  is selected from  $C_{1-12}$  alkyl,  $C_{2-12}$  alkenyl,  $C_{2-12}$  alkynyl,  $-(CH_2)_nC_{3-7}$  cycloalkyl,  $-(CH_2)_nC_{4-7}$  cycloalkenyl,  $-(CH_2)_n$  aryl $C_{1-12}$  alkyl,  $-(CH_2)_n$  aryl $C_{2-12}$  alkenyl, aryl $C_{2-12}$  alkynyl, and  $-(CH_2)_n$  heterocyclyl; n is 0-6 and the alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl groups are optionally substituted;

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 $R_2$  is selected from -CH<sub>2</sub>R<sub>3</sub>, -C(Y)R<sub>3</sub>, -C(Y)OR<sub>3</sub>, -C(Y)N(R<sub>4</sub>)R<sub>3</sub>, -C(Y)CH<sub>2</sub>N(R<sub>4</sub>)R<sub>3</sub>, -C(Y)CH<sub>2</sub>SR<sub>3</sub> and -S(O)<sub>w</sub>R<sub>5</sub>, where R<sub>3</sub> is selected from hydrogen, C<sub>1-12</sub> alkyl, C<sub>2-12</sub> alkenyl, -(CH<sub>2</sub>)<sub>m</sub>C<sub>3-7</sub> cycloalkyl, -(CH<sub>2</sub>)<sub>m</sub>C<sub>4-7</sub> cycloalkenyl, -(CH<sub>2</sub>)<sub>m</sub> aryl, -(CH<sub>2</sub>)<sub>m</sub> arylC<sub>1-12</sub> alkyl, -(CH<sub>2</sub>)<sub>m</sub> arylC<sub>2-12</sub> alkenyl, -(CH<sub>2</sub>)<sub>m</sub> arylC<sub>2-12</sub> alkynyl and -(CH<sub>2</sub>)<sub>m</sub> heterocyclyl; and when R<sub>2</sub> is -CH<sub>2</sub>R<sub>3</sub>, or -C(Y)R<sub>3</sub>, R<sub>3</sub> may also be selected from -S-R<sub>5</sub> and -O-R<sub>5</sub>; m is 0-6; R<sub>4</sub> is hydrogen or C<sub>1-6</sub> alkyl; R<sub>5</sub> is C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>3-7</sub> cycloalkyl, C<sub>4-7</sub> cycloalkenyl, benzyl, aryl or heterocyclyl; w is 0, 1 or 2, and the alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl groups are optionally substituted;

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X and Y are independently selected from O, S and  $NR_{6}$ , where  $R_{6}$  is independently selected from hydrogen, lower alkyl, hydroxy and lower alkoxy.

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- 2. Use as defined in claim 1 wherein  $R_2$  is not an unsubstituted  $-C_{1-6}$ alkyl or unsubstituted  $-C(O)-C_{1-6}$ alkyl.
- 5 3. Use as defined in claim 1 wherein ring A is an optionally substituted aryl ring.
  - 4. Use as defined in claim 1 wherein ring A is an optionally substituted phenyl ring.
- 5. Use as defined in claim 1 wherein ring A is an optionally substituted heteroaryl ring.
  - 6. Use as defined in claim 1 wherein ring A together with the atoms to which it is attached, represents an optionally substituted pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl, pyrrolyl, furyl, thienyl, imidazolyl, oxazolyl or isoxazolyl ring.
  - 7. Use as defined in claim 1 wherein ring A is an optionally substituted pyridyl, pyridazinyl, pyrimidinyl or pyrazinyl ring.
  - 8. Use as defined in claim 1 wherein ring A is optionally substituted pyridyl ring.
  - 9. Use as defined in claim 1 wherein ring A is optionally substituted with one or more substituents independently selected from halo,  $-NH_2$ ,  $NO_2$ ,  $C_{1-6}$  alkyl, aryl and heterocyclyl, the aryl and heterocyclyl groups optionally substituted with halo,  $C_{1-6}$  alkyl or halo substituted  $C_{1-6}$  alkyl and, when ring A contains one or more ring nitrogens, the optional substituents include N-oxides of one or more of the ring nitrogens and pyridinium salts thereof.
- 10. Use as defined in claim 1 wherein ring A is optionally substituted with a substituent selected from halo, alkyl, C<sub>6</sub>H<sub>5</sub>- CH<sub>3</sub>-C<sub>6</sub>H<sub>4</sub>-, CF<sub>3</sub>-C<sub>6</sub>H<sub>4</sub>-, pyridyl, NO<sub>2</sub> and when ring A contains one or more ring nitrogens, the optional substituent also include an N-oxide form of a ring nitrogen, and pyridinium salts thereof.
  - 11. Use as defined in claim 1 wherein ring A is not substituted.
- 35 12. Use as defined in claim 1 of a compound of the formula IV

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$$R_1$$
  $N$   $B$   $N$   $C$   $N$   $C$ 

Formula IV

its salts, N-oxides and pharmaceutically acceptable derivatives thereof, wherein B-C, X, R<sub>1</sub> and R<sub>2</sub> are as defined in claim 1.

13. Use as defined in any one of claims 1 to 12, wherein R<sub>2</sub> is selected from -CH<sub>2</sub>R<sub>3</sub>,  $-C(Y)R_3$ ,  $-C(Y)OR_3$ ,  $-C(Y)N(R_4)R_3$ ,  $-C(Y)CH_2N(R_4)R_3$ ,  $-C(Y)CH_2SR_3$  and  $-S(O)_wR_5$ , where R<sub>3</sub> is selected from hydrogen, -C<sub>1-12</sub>alkyl, -C<sub>2-12</sub>alkenyl, -C<sub>2-12</sub>alkynyl, -(CH<sub>2</sub>)<sub>m</sub>C<sub>3-</sub> 10 7cycloalkyl,  $-(CH_2)_mC_{4-7}$  cycloalkenyl,  $-(CH_2)_maryl$ ,  $-(CH_2)_marylC_{1-12}$ -(CH<sub>2</sub>)<sub>m</sub>arylC<sub>2-12</sub>alkenyl, -(CH<sub>2</sub>)<sub>m</sub>arylC<sub>2-12</sub> alkynyl, -(CH<sub>2</sub>)<sub>m</sub>heterocyclyl, and when R<sub>2</sub> is -CH<sub>2</sub>R<sub>3</sub>, or -C(Y)R<sub>3</sub>, R<sub>3</sub> may also be selected from -S-R<sub>5</sub> and -O-R<sub>5</sub>; m is 0-6, R<sub>4</sub> is hydrogen or is C<sub>1-6</sub> alkyl, R<sub>5</sub> is selected from C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>3-</sub> 7cycloalkyl, C<sub>4-7</sub> cycloalkenyl, benzyl, aryl and heterocyclyl; w is 0, 1 or 2, and the alkyl, 15 alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl groups are optionally substituted with one or more substituents selected from C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, C<sub>2-6</sub> alkenyl,  $C_{2-6}$  alkynyl, halo, halo- $C_{1-6}$  alkyl (including  $CF_3$ ), hydroxy, mercapto, nitro, cyano,  $NH_2$ , mono or di( $C_{1-6}$ alkyl) amino, phenyl, benzyl and heterocyclyl.

14. Use as defined in claim 1 wherein  $R_2$  is  $-CH_2-R_3$ , and  $R_3$  is  $-(CH_2)_m$  aryl or  $-(CH_2)_m$  heterocyclyl and m is 0 to 3 and the aryl or heterocyclyl ring is optionally substituted.

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15. Use as defined in claim 1 wherein R<sub>2</sub> is -COR<sub>3</sub> and R<sub>3</sub> is aryl or heterocyclyl and is optionally substituted.

16. Use as defined in claim 14 or 15 wherein R<sub>3</sub> is optionally substituted phenyl, naphthyl, furyl, thienyl, pyrrolyl, H-pyrrolyl, pyrrolinyl, pyrrolidinyl, oxazolyl, oxadiazolyl, (including 1,2,3 and 1,2,4 oxadiazolyls) thiazolyl, isoxazolyl, furazanyl, isothiazolyl, pyrazolyl, pyrazolinyl, pyrazolidinyl, imidazolyl, imidazolyl, triazolyl (including 1,2,3 and 1,3,4 thiadiazolyls), pyridyl, pyrimidinyl, pyridazinyl, pyranyl, pyrazinyl, piperidinyl, 1,4-dioxanyl, morpholinyl, 1,4-dithianyl, thiomorpholinyl, piperazinyl, 1,3,5-trithianyl, triazinyl, 1H thieno[2,3-c]pyrazolyl, thieno[2,3-b]furyl, indolyl, isoindolyl, benzofuranyl, benzothienyl, benzoxazolyl, benzothiazolyl, benzisoxazolyl, benzisothiazolyl,

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benzimidazolyl, indazolyl, isoquinolinyl, quinolinyl, quinoxalinyl, uridinyl, purinyl, cinnolinyl, phthalazinyl, quinazolinyl, quinoxalinyl, benzotriazinyl, naphthyridinyl or pteridinyl.

- Use as defined in claim 16, wherein  $R_3$  is optionally substituted with one or more substituents selected from  $C_{1-6}$  alkyl,  $C_{1-6}$  alkoxy,  $C_{2-6}$  alkenyl,  $C_{2-6}$  alkynyl, halo, halo- $C_{1-6}$  alkyl (including  $CF_3$ ), hydroxy, mercapto, nitro, cyano,  $NH_2$ , mono or di( $C_{1-6}$ alkyl) amino, phenyl, benzyl and heterocyclyl.
- 18. Use as defined in claim 1 wherein R<sub>2</sub> is -CON(H)R<sub>3</sub>, and R<sub>3</sub> is -(CH<sub>2</sub>)<sub>m</sub> aryl or (CH<sub>2</sub>)<sub>m</sub> heteroaryl and m is 0 to 2 and the aryl or heteroaryl ring is optionally substituted with one or more substituents independently selected from halo, lower alkyl, hydroxy, lower alkoxy and phenyl.
- 15 19. Use as defined in claim 1 wherein link -B-C- is an optionally substituted link of the formula -CH<sub>2</sub>-(CH<sub>2</sub>)<sub>z</sub>-, where z is 1-4.
  - 20. Use as defined in claim 19 wherein z is 1 or 2.
- 20 21. Use as defined in claim 1 wherein –B-C- is a linker of the formula –CH<sub>2</sub>CH<sub>2</sub>-.
  - 22. Use as defined in claim 1 wherein linker -B-C- is optionally substituted no more than three optional substituents, the substituents selected from halo, lower alkyl, hydroxy, lower alkoxy, phenyl and benzyl.

23. Use as defined in claim 1 wherein linker –B-C- is not substituted.

- 24. Use as defined in any one of claims 1 to 21 wherein X is oxygen or sulphur.
- 30 25. Use as defined in claim 1 wherein  $R_1$  is an optionally substituted aryl or heterocyclyl group.
  - 26. Use as defined in claim 1 wherein  $R_1$  represents phenyl, thienyl, pyrrolyl, pyridyl ring or a  $-C_{1-6}$  alkylphenyl group, the rings being optional substituted with halo, hydroxy,
- nitro, -NR'R" (where R' and R" are independently selected from hydrogen, lower alkyl and -C(O)R, where R is C<sub>1-6</sub> alkyl, phenyl or heterocyclyl), C<sub>1-12</sub>alkyl, phenyl and -O-R<sub>a</sub>, where R<sub>a</sub> is -C<sub>1-12</sub>alkyl, -C<sub>3-7</sub>cycloalkyl, -C<sub>1-12</sub>alkylC<sub>3-7</sub>cycloalkyl, phenyl or -C<sub>1-12</sub>alkylphenyl; and the C<sub>1-12</sub>alkyl, phenyl or R<sub>a</sub> group may be optionally substituted with halo, -CN, -NR'R", -CO<sub>2</sub>R or -CONR'R", where R, R' and R" are independently selected
- 40 from hydrogen or lower alkyl.

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27. Use as defined in claim 1 wherein R<sub>1</sub> is phenyl optionally substituted with a substituent selected from halo, -C<sub>1-6</sub>alkyl, -C<sub>1-6</sub>alkylhalo, -C<sub>1-6</sub>alkylCN, -OC<sub>1-6</sub>alkylCN, -OC<sub>1-6</sub>alkylCO<sub>2</sub>NH<sub>2</sub>, -OC<sub>1-6</sub>alkylCN, -OC<sub>1-6</sub>alkylC<sub>3-7</sub>cycloalkyl, -OC<sub>1-6</sub>alkylC<sub>6</sub>H<sub>5</sub>, -OC<sub>1-6</sub>alkylOCH<sub>3</sub>, -OC<sub>6</sub>H<sub>5</sub>, -OC<sub>6</sub>H<sub>4</sub>halo, -CF<sub>3</sub>, -OCF<sub>3</sub>, -NR'R" (where R' and R" are independently selected from hydrogen, -C(O)C<sub>1-6</sub>alkyl, -C(O)C<sub>6</sub>H<sub>5</sub>, -C(O)CH=CHCO<sub>2</sub>H, -C(O)C<sub>1-6</sub>alkylCO<sub>2</sub>H, -C(O)C<sub>1-6</sub>alkylCO<sub>2</sub>CH<sub>3</sub>, -C(O)C<sub>1-6</sub>alkylC<sub>6</sub>H<sub>5</sub>, -C(O)C<sub>1-6</sub>alkylC<sub>6</sub>H<sub>4</sub>CH<sub>3</sub>, -C(O)C<sub>1-6</sub>alkylC<sub>6</sub>H<sub>4</sub>OCH<sub>3</sub> and -C(O)C<sub>1-6</sub>alkylC<sub>6</sub>H<sub>4</sub>halo), -CO<sub>2</sub>H, -CO<sub>2</sub>C<sub>1-6</sub>alkyl, -NO<sub>2</sub>, -OH, -C<sub>6</sub>H<sub>5</sub>, -C<sub>6</sub>H<sub>4</sub>C<sub>1-6</sub>alkyl, -C<sub>6</sub>H<sub>4</sub>halo and -OC(O)C<sub>1-6</sub>alkyl.

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- 28. Use as defined in claim 1 wherein  $R_1$  is phenyl substituted with halo,  $-OC_{1-6}$ alkyl,  $-OC_{1-6}$ alkylhalo,  $-OC_{1-6}$ alkyl $CO_2NH_2$ ,  $-OC_{1-6}$ alkylCN,  $-OC_{1-6}$ alkyl $C_{3-7}$ cycloalkyl,  $-OC_{1-6}$ alkyl $C_6H_5$  or  $-OC_{1-6}$ alkyl $CO_2NH_3$ .
- 15 29. Use as defined in claim 1 wherein  $R_1$  is 4-chlorophenyl.
  - 30. A method for the treatment of infections involving viruses of the *Pneumovirinae* sub-family by the inhibition of the virus's fusion processes by the administration of a therapeutically effective amount of a compound of formula I as defined in any one of claims 1 to 29, the salt or pharmaceutically acceptable derivatives thereof to a patient in need to treatment.
- 31. A pharmaceutical formulation for the treatment of infections involving viruses of the *Pneumovirinae* sub-family comprising a compound of formula I as defined in any one of claims 1 to 29, the salt or pharmaceutically acceptable derivatives thereof.
  - 32. Use of a compound of formula I as defined in any one of claims 1 to 29, the salt or pharmaceutically acceptable derivatives thereof in the manufacture of a medicament for the treatment of infections involving viruses of the *Pneumovirinae* sub-family.

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33. A method for treating mammals infected with viruses of the *Pneumovirinae* subfamily, which comprises administering to the mammal a therapeutically effective amount of one or more of the compounds of formula I as defined in any one of claims 1 to 29, or pharmaceutically acceptable derivatives thereof.

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34. A method for preventing the infection of mammals with viruses of the *Pneumovirinae* sub-family, which comprises administering to the mammal a therapeutically effective amount of one or more of the compounds of formula I as defined in any one of claims 1 to 29, or pharmaceutically acceptable derivatives thereof.

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- 35. The use or method according to any one of claims 1 to 34 in the treatment of infections involving viruses of the Pneumovirus and Metapneumovirus genus.
- 36. The use or method according to any one of claims 1 to 34 in the treatment of respiratory syncytial virus (RSV).
  - 37. The use or method according to any one of claims 1 to 34 in the treatment of human RSV or human metapneumovirus.

## 10 38. A compound of formula I

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its salts, and pharmaceutically acceptable derivatives thereof, wherein

A together with the atoms to which it is attached, represents an optionally substituted phenyl, pyridyl, pyridazinyl, pyrimidinyl or pyrazinyl ring;

B-C is an optionally substituted link of the formula  $-CH_2-(CH_2)_z$ , where z is 1-4;

 $R_1$  is selected from  $C_{1-12}$  alkyl,  $C_{2-12}$  alkenyl,  $C_{2-12}$  alkynyl,  $-(CH_2)_nC_{3-7}$  cycloalkyl,  $-(CH_2)_nC_{4-7}$  cycloalkenyl,  $-(CH_2)_n$  aryl $C_{1-12}$  alkyl,  $-(CH_2)_n$  aryl $C_{2-12}$  alkenyl,  $-(CH_2)_n$  aryl $C_{2-12}$  alkynyl, and  $-(CH_2)_n$  heterocyclyl; n is 0-6 and the alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl groups are optionally substituted;

R<sub>2</sub> is selected from -CH<sub>2</sub>R<sub>3</sub>, -C(Y)R<sub>3</sub>, -C(Y)OR<sub>3</sub>, -C(Y)N(R<sub>4</sub>)R<sub>3</sub> and -S(O)<sub>w</sub>R<sub>5</sub>, where R<sub>3</sub> is selected from hydrogen, C<sub>1-12</sub> alkyl, C<sub>2-12</sub> alkenyl, C<sub>2-12</sub> alkynyl, -(CH<sub>2</sub>)<sub>m</sub>C<sub>3-7</sub> cycloalkyl, -(CH<sub>2</sub>)<sub>m</sub>C<sub>4-7</sub> cycloalkenyl, -(CH<sub>2</sub>)<sub>m</sub> aryl, -(CH<sub>2</sub>)<sub>m</sub> arylC<sub>1-12</sub> alkyl, -(CH<sub>2</sub>)<sub>m</sub> arylC<sub>2-12</sub> alkenyl, -(CH<sub>2</sub>)<sub>m</sub> arylC<sub>2-12</sub> alkynyl and -(CH<sub>2</sub>)<sub>m</sub> heterocyclyl; and when R<sub>2</sub> is -CH<sub>2</sub>R<sub>3</sub>, or -C(Y)R<sub>3</sub>, R<sub>3</sub> may also be selected from -S-R<sub>5</sub> and -O-R<sub>5</sub>; m is 0-6; R<sub>4</sub> is hydrogen or C<sub>1-6</sub> alkyl; R<sub>5</sub> is C<sub>1-6</sub> alkyl, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>3-7</sub> cycloalkyl, C<sub>4-7</sub> cycloalkenyl, benzyl, aryl or heterocyclyl; w is 0, 1 or 2, and the alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl groups are optionally substituted,

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X and Y are independently selected from O, S and NR<sub>6</sub>, where R<sub>6</sub> is independently selected from hydrogen, lower alkyl, hydroxy and lower alkoxy;

with the provisos that when A is phenyl and  $R_1$  is 4-chlorophenyl or unsubstituted phenyl

- 5 (i) R<sub>3</sub> is not unsubstituted cyclopropyl, halomethyl, unsubstituted phenyl or phenyl with only halo, -CH<sub>3</sub> and/or -OCH<sub>3</sub> substituents when R<sub>2</sub> is COR<sub>3</sub>;
  - R<sub>3</sub> is not unsubstituted phenyl or phenyl with only halo, -CH<sub>3</sub>, -OCH<sub>3</sub> and/or (ii) -C(O)OCH<sub>2</sub>CH<sub>3</sub> substituents when R<sub>2</sub> is C(O)NHR<sub>3</sub>;
  - R<sub>3</sub> is not unsubstituted phenyl or phenyl with only halo, -CH<sub>3</sub>, -OCH<sub>3</sub> and/or (iii) -C(O)OCH<sub>2</sub>CH<sub>3</sub> substituents when R<sub>2</sub> is C(S)NHR<sub>3</sub>;

and with the provisos

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- when A is phenyl and R<sub>2</sub> is CH<sub>2</sub>R<sub>3</sub>, R<sub>3</sub> is not hydrogen, unsubstituted C<sub>1-6</sub> alkyl or (iv) C<sub>1-6</sub> alkyl only substituted with NH<sub>2</sub>, mono or di C<sub>1-6</sub> alkyl amino groups;
- 15 when A is phenyl and  $R_1$  is 4-methoxyphenyl,  $R_2$  is not CHO; (v)
  - when A is phenyl and  $R_1$  is phenyl optionally substituted with only halo,  $C_{1-6}$  alkyl (vi) and / or C<sub>1-6</sub> alkoxy and R<sub>2</sub> is COR<sub>3</sub>, R<sub>3</sub> is not methylene substituted with NH<sub>2</sub>, mono or di  $C_{1-6}$  alkyl amino, N-piperidinyl or N-morpholinyl;
- when A is phenyl and R<sub>1</sub> is 3-CH<sub>3</sub>,4-CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>NHC(O)CH<sub>2</sub>O-phenyl, R<sub>2</sub> is not (vii) 20 -S(O)<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>CH<sub>3</sub>, -CHO, -COCH<sub>2</sub>CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>2</sub>OH, -CH<sub>2</sub>CH<sub>2</sub>OCH<sub>3</sub>, -CH<sub>2</sub>CO<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub> or  $C_{1-6}$  alkyl;
  - when A is pyridyl and R<sub>1</sub> is 3-CH<sub>3</sub>,4-CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>NHC(O)CH<sub>2</sub>O-phenyl, R<sub>2</sub> is not  $CH_3$ .
- 25 The compound as defined in claim 38, the salt or pharmaceutically acceptable 39. derivative thereof, with the proviso that when ring A is phenyl
  - $R_3$  is not hydrogen or optionally substituted  $C_{1-6}$  alkyl when  $R_2$  is  $-CH_2R_3$  or (i)  $-COR_3$ ;
- (ii) R<sub>3</sub> is not (CH<sub>2</sub>)<sub>m</sub>heterocyclyl where m is 1 or 2 and the heterocyclyl ring is 30 piperidinyl, morpholinyl, pyrrolidinyl, piperazinyl, thiomorpholinyl when R<sub>2</sub> is -COR<sub>3</sub> and R<sub>1</sub> is 4-chlorophenyl, 4-methoxyphenyl or unsubstituted phenyl;
  - (iii) R<sub>2</sub> is not benzyl; and with the proviso
  - (iv)  $R_2$  is not  $-CH_3$  when A is pyridyl.

40. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, when A is phenyl and R<sub>2</sub> is -CH<sub>2</sub>R<sub>3</sub> or -C(O)R<sub>3</sub>, and R<sub>3</sub> is selected from  $C_{7-12}$  alkyl,  $C_{2-12}$  alkenyl,  $C_{2-12}$  alkynyl,  $-(CH_2)_mC_{3-7}$  cycloalkyl,  $-(CH_2)_mC_{4-7}$ cycloalkenyl, -(CH<sub>2</sub>)<sub>m</sub> aryl, -(CH<sub>2</sub>)<sub>m</sub> arylC<sub>1-12</sub> alkyl, -(CH<sub>2</sub>)<sub>m</sub> arylC<sub>2-12</sub> alkenyl, -(CH<sub>2</sub>)<sub>m</sub>

40 aryl $C_{2-12}$  alkynyl, -(CH<sub>2</sub>)<sub>m</sub> heterocyclyl, -SR<sub>5</sub> and -OR<sub>5</sub>.

- 41. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein ring A is optionally substituted with one or more substituents independently selected from halo, -NH<sub>2</sub>, NO<sub>2</sub>, C<sub>1-6</sub> alkyl, aryl and heterocyclyl, the aryl and heterocyclyl groups optionally substituted with halo, C<sub>1-6</sub>alkyl or halo substituted C<sub>1-6</sub> alkyl and, when ring A contains one or more ring nitrogens, the optional substituents include N-oxides of one or more of the ring nitrogens.
- 42. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein ring A is optionally substituted with a substituent selected from halo, alkyl, C<sub>6</sub>H<sub>5</sub>- CH<sub>3</sub>-C<sub>6</sub>H<sub>4</sub>-, CF<sub>3</sub>-C<sub>6</sub>H<sub>4</sub>-, pyridyl, NO<sub>2</sub> and when ring A contains one or more ring nitrogens, the optional substituent also include an N-oxide form of a ring nitrogen.
- 15 43. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein ring A is not substituted.
- 44. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein R<sub>2</sub> is selected from -CH<sub>2</sub>R<sub>3</sub>, -C(Y)R<sub>3</sub>, -C(Y)OR<sub>3</sub>, -20  $C(Y)N(R_4)R_3$ ,  $-C(Y)CH_2N(R_4)R_3$ ,  $-C(Y)CH_2SR_3$  and  $-S(O)_wR_5$ , where  $R_3$  is selected from hydrogen,  $-C_{1-12}$ alkyl,  $-C_{2-12}$ alkenyl,  $-C_{2-12}$ alkynyl,  $-(CH_2)_mC_{3-7}$ cycloalkyl,  $-(CH_2)_mC_{4-7}$ cycloalkenyl,  $-(CH_2)_m$ aryl,  $-(CH_2)_m$ aryl $C_{1-12}$  alkyl,  $-(CH_2)_m$ aryl $C_{2-12}$ alkenyl, (CH<sub>2</sub>)<sub>m</sub>arylC<sub>2-12</sub> alkynyl, -(CH<sub>2</sub>)<sub>m</sub>heterocyclyl, and when R<sub>2</sub> is -CH<sub>2</sub>R<sub>3</sub>, or -C(Y)R<sub>3</sub>, R<sub>3</sub> may also be selected from -S-R<sub>5</sub> and -O-R<sub>5</sub>; m is 0-6, R<sub>4</sub> is hydrogen or is C<sub>1-6</sub> alkyl, R<sub>5</sub> is selected from C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>3-7</sub>cycloalkyl, C<sub>4-7</sub> cycloalkenyl, benzyl, 25 aryl and heterocyclyl; w is 0, 1 or 2, and the alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl and heterocyclyl groups are optionally substituted with one or more substituents selected from  $C_{1-6}$  alkyl,  $C_{1-6}$  alkoxy,  $C_{2-6}$  alkenyl,  $C_{2-6}$  alkynyl, halo, halo- $C_{1-6}$ alkyl (including CF<sub>3</sub>), hydroxy, mercapto, nitro, cyano, NH<sub>2</sub>, mono or di(C<sub>1-6</sub>alkyl) amino, phenyl, benzyl and heterocyclyl, the substituents being optionally substituted. 30
  - 45. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein  $R_2$  is  $-CH_2-R_3$ , and  $R_3$  is  $-(CH_2)_m$  aryl or  $-(CH_2)_m$  heterocyclyl and m is 0 to 3 and the aryl or heterocyclyl ring is optionally substituted.

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46. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein  $R_2$  is  $-COR_3$  and  $R_3$  is aryl or heterocyclyl and is optionally substituted.

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- 47. The compound as defined in claim 45 or 46, the salt or pharmaceutically acceptable derivative thereof, wherein R<sub>3</sub> is optionally substituted phenyl, naphthyl, furyl, thienyl, pyrrolyl, H-pyrrolyl, pyrrolinyl, pyrrolidinyl, oxazolyl, oxadiazolyl, (including 1,2,3 and 1,2,4 oxadiazolyls) thiazolyl, isoxazolyl, furazanyl, isothiazolyl, pyrazolyl, pyrazolinyl, pyrazolidinyl, imidazolyl, imidazolinyl, triazolyl (including 1,2,3 and 1,3,4 triazolyls), tetrazolyl, thiadiazolyl (including 1,2,3 and 1,3,4 thiadiazolyls), pyridyl, pyrimidinyl, pyridazinyl, pyranyl, pyrazinyl, piperidinyl, 1,4-dioxanyl, morpholinyl, 1,4-dithianyl, thiomorpholinyl, piperazinyl, 1,3,5-trithianyl, triazinyl, 1H thieno[2,3-c]pyrazolyl, thieno[2,3-b]furyl, indolyl, isoindolyl, benzofuranyl, benzothienyl, benzoxazolyl, benzisoxazolyl, benzisothiazolyl, benzimidazolyl, indazolyl, isoquinolinyl, quinoxalinyl, quinoxalinyl, uridinyl, purinyl, cinnolinyl, phthalazinyl, quinazolinyl, quinoxalinyl, benzotriazinyl, naphthyridinyl or pteridinyl.
- 48. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein R<sub>3</sub> is optionally substituted with one or more substituents selected from C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, halo, halo-C<sub>1-6</sub> alkyl (including CF<sub>3</sub>), hydroxy, mercapto, nitro, cyano, NH<sub>2</sub>, mono or di(C<sub>1-6</sub>alkyl) amino, phenyl, benzyl and heterocyclyl, the phenyl, benzyl and heterocyclyl groups being optionally substituted.

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- 49. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein R<sub>2</sub> is -CON(H)R<sub>3</sub>, and R<sub>3</sub> is -(CH<sub>2</sub>)<sub>m</sub> aryl or -(CH<sub>2</sub>)<sub>m</sub> heteroaryl and m is 0 to 2 and the aryl or heteroaryl ring is optionally substituted with one or more substituents independently selected from halo, lower alkyl, hydroxy, lower alkoxy and phenyl.
- 50. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein z is 1 or 2.
- 30 51. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein –B-C- is a linker of the formula -CH<sub>2</sub>CH<sub>2</sub>-.
  - 52. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein the linker -B-C- is optionally substituted no more than three optional substituents, the substituents selected from halo, lower alkyl, hydroxy, lower alkoxy, phenyl and benzyl.
    - 53. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein the linker –B-C- is not substituted.

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- 54. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein X is oxygen or sulphur.
- 55. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein X is oxygen.
  - 56. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein  $R_1$  is an optionally substituted aryl or heterocyclyl group.
- 57. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein R<sub>1</sub> represents phenyl, thienyl, pyrrolyl, pyridyl ring or a -C<sub>1-6</sub> alkylphenyl group, the rings being optional substituted with halo, hydroxy, nitro, -NR'R" (where R' and R" are independently selected from hydrogen, lower alkyl and -C(O)R, where R is C<sub>1-6</sub> alkyl, phenyl or heterocyclyl), C<sub>1-12</sub>alkyl, phenyl and -O-R<sub>a</sub>, where R<sub>a</sub> is -
- $C_{1-12}$ alkyl,  $-C_{3-7}$ cycloalkyl,  $-C_{1-12}$ alkyl $C_{3-7}$ cycloalkyl, phenyl or  $-C_{1-12}$ alkylphenyl; and the  $C_{1-12}$ alkyl, phenyl or  $R_a$  group may be optionally substituted with halo, -CN, -NR'R'',  $-CO_2R$  or -CONR'R'', where R, R' and R'' are independently selected from hydrogen or lower alkyl.
- 58. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein R<sub>1</sub> is phenyl optionally substituted with a substituent selected from halo, -C<sub>1-6</sub>alkyl, -C<sub>1-6</sub>alkylhalo, -C<sub>1-6</sub>alkylCN, -OC<sub>1-6</sub>alkylCN, -OC<sub>1-6</sub>alkylCN, -OC<sub>1-6</sub>alkylCO<sub>2</sub>NH<sub>2</sub>, -OC<sub>1-6</sub>alkylCN, -OC<sub>1-6</sub>alkylC<sub>3-7</sub>cycloalkyl, -OC<sub>1-6</sub>alkylC<sub>6</sub>H<sub>5</sub>, -OC<sub>1-6</sub>alkylOCH<sub>3</sub>, -OC<sub>6</sub>H<sub>5</sub>, -OC<sub>6</sub>H<sub>4</sub>halo, -CF<sub>3</sub>, -OCF<sub>3</sub>, -NR'R" (where R' and R" are
- independently selected from hydrogen,  $-C(O)C_{1-6}$ alkyl,  $-C(O)C_6H_5$ ,  $-C(O)CH=CHCO_2H$ ,  $-C(O)C_{1-6}$ alkyl $CO_2H$ ,  $-C(O)C_{1-6}$ alkyl $CO_2CH_3$ ,  $-CO_2C_{1-6}$ alkyl,  $-CO_$
- 30 59. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein R<sub>1</sub> is halo-phenyl.

- 60. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivative thereof, wherein  $R_1$  is 4-chlorophenyl.
- 61. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivatives thereof, wherein A is an optionally substituted phenyl ring.

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- 62. The compound as defined in claim 38, the salt or pharmaceutically acceptable derivatives thereof, wherein  $R_2$  is  $C(O)-R_3$  and  $R_3$  is  $-(CH_2)_m$ -aryl or  $(CH_2)_m$ -heteroaryl, where m is 0 to 6, and the aryl or heteroaryl group is optionally substituted.
- 5 63. The compound as defined in claim 38 of the formula IV

$$R_1$$
 $N$ 
 $B$ 
 $X$ 

Formula IV

- wherein R<sub>1</sub>, R<sub>2</sub>, X and -B-C- are as defined in claim 38, and the N-oxide form and pyridium salt thereof.
- 64. The compound as defined in claim 63, and the N-oxide form and pyridium salt thereof, wherein R<sub>2</sub> is C(O)R<sub>3</sub> and R<sub>3</sub> is -(CH<sub>2</sub>)<sub>m</sub>-aryl or (CH<sub>2</sub>)<sub>m</sub>-heteroaryl, where m is 0 to 6, and the aryl or heteroaryl group is optionally substituted.
  - 65. A compound disclosed in table 2 or 3.
- 66. A pharmaceutical formulation for the treatment of infections involving viruses of 20 Pneumovirinae sub-family comprising a compound of formula I as defined in any one of claims 38 to 65, the salt or pharmaceutically acceptable derivative thereof.